

WHAT IS CLAIMED IS:

1. An audio interactive navigation system for, at the time of desiring map information, traffic information, and other required information in a car, inquiring an information distribution service provider for distribution said information and notifying a driver and a fellow passenger of said obtained information, comprising:
  - 10 a moving terminal device capable of being operated by inputting and outputting voice and outputting voice and data to an external device,
  - a communication device capable of connecting a communication line to an outside in said car,
  - 15 an audio interactive server which can input and output voice and data, is connected to said external device and Internet on the basis of audio interactions by a voice recognition process and a voice synthesis process, and executes information transfer, and
  - 20 one or a plurality of information distribution service providers connected to said Internet for distributing information such as map information and traffic information.

2. A moving terminal device for, at the time of desiring map information, traffic information, and other required information in a car, inquiring an information distribution service provider for distribution said information and notifying a driver and a fellow passenger of said obtained information, wherein

5 said moving terminal device transmits input voice data to an audio interactive server for executing audio interactions by a voice recognition process and a voice synthesis process via a communication device capable of connecting a communication line to an outside in said car, thereby interprets and executes said voice data, obtains said information such as map information and traffic information from said information distribution service provider, and receives said results from said audio interactive server by voice or data.

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3. A moving terminal device according to Claim 2, further comprising:

20 input means for starting said communication device by one operation and establishing communication for said audio interactive server.

4. A moving terminal device according to Claim 2, wherein:

25 said moving terminal device has a screen for displaying

images of character information and map information and displays interaction contents during audio interaction on said screen.

5 5. A moving terminal device according to Claim 2, wherein:

when effective information such as individual information is input to said communication device beforehand and said communication device is installed in a predetermined place of said moving terminal device, said 10 moving terminal device automatically establishes communication with said audio interactive server and transmits said information to said audio interactive server.

15 6. A moving terminal device according to Claim 2, wherein:

when said communication device is installed in a predetermined place of said moving terminal device, said moving terminal device automatically establishes communication with said audio interactive server and 20 receives effective information such as a history at the time of previous access from said audio interactive server.

7. A moving terminal device according to Claim 2, wherein:  
said moving terminal device switches voice output 25 between voice output from said audio interactive server

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and voice output in said moving terminal device after said moving terminal device receives voice data having a specific meaning such as interaction end from said audio interactive server.

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8. A moving terminal device according to Claim 2, wherein:

    said moving terminal device switches voice output between voice output from said audio interactive server and voice output in said moving terminal device after said moving terminal device transmits voice data having a specific meaning such as interaction end.

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9. A moving terminal device according to Claim 2, wherein:

    said moving terminal device automatically transmits predetermined information of non-voice such as present location information held in said moving terminal device to said audio interactive server after said moving terminal device receives voice data having a specific meaning such as interaction end from said audio interactive server.

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10. A moving terminal device according to Claim 2, wherein:

    said moving terminal device automatically transmits predetermined information of non-voice such as present location information held in said moving terminal device to said audio interactive server after said moving terminal

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device transmits voice data having a specific meaning such as interaction end.

11. A moving terminal device according to Claim 2, wherein:

5       when said audio interactive server requests connection to said moving terminal device via said communication line, said moving terminal device has a certification process function for identifying from a voice response by said moving terminal device that a communication partner is a  
10      one from said audio interactive server.

12. An audio interactive navigation system for, at the time of desiring map information, traffic information, and other required information in a car, inquiring an information distribution service provider for distribution said information and notifying a driver and a fellow passenger of said obtained information, comprising:

20      a moving terminal device which has an interface for inputting and outputting voice, internally has a voice recognition processing function and a voice synthesis processing function, and can execute transfer of information with an external device by an operation on the basis of audio interactions,

25      a communication device capable of connecting a

communication line to an outside in said car,

an audio interactive server connected to said external device and Internet according to an instruction from said moving terminal device for executing information transfer,

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one or a plurality of information distribution service providers connected to said Internet for distributing information such as map information and traffic information.

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13. A moving terminal device for, at the time of desiring map information, traffic information, and other required information in a car, inquiring an information distribution service provider for distribution said information and notifying a driver and a fellow passenger of said obtained information, wherein:

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said moving terminal device has an interface for inputting and outputting voice, internally has a voice recognition processing function and a voice synthesis processing function, generates operation command data on the basis of audio interactions, transmits said operation command data to an audio interactive server via a communication device for connecting a communication line to an outside in said car, thereby executes said operation command data, obtains said map information and said traffic

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information from said information distribution service provider, and receives data of said results from said audio interactive server.

5       14. An audio interactive server with navigation for, at the time of desiring map information, traffic information, and other required information in a car, inquiring an information distribution service provider for distribution said information and notifying a driver and  
10      a fellow passenger of said obtained information, comprising:

15      a command conversion processing unit for performing a voice recognition process on the basis of voice input to said audio interactive server, analyzing contents of said obtained recognition result data, and generating a command to be transferred to said information distribution service provider.

20      15. An audio interactive server according to Claim 14, wherein:

25      said audio interactive server has a service knowledge data base concerning distribution information in said command conversion processing unit, performs said voice recognition process on the basis of said voice input to said audio interactive server, analyzes said contents of

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said obtained recognition result data using said service knowledge, and generates said command to be transferred to said information distribution service provider.

5 16. An audio interactive server according to Claim 14,  
wherein:

10 said audio interactive server internally has an interaction generation template having a described control flow for realizing a basic interaction and an interactive data generation unit for processing data on the basis of said interaction generation template and generating a control flow for realizing an audio interaction suited to obtain desired distribution information.

15 17. An audio interactive server according to Claim 14,  
wherein:

20 said audio interactive server has an individual information management unit for controlling distribution information including individual information such as characteristics for each subject to be connected and a destination and route information of search results.

18. An audio interactive server according to Claim 17, wherein:

25 said audio interactive server inquires a predetermined

information distribution service provider about necessary traffic congestion information and event information via Internet on the basis of said route information of said subjects to be connected which is held in said individual 5 information management unit.

19. An audio interactive server according to Claim 17, wherein:

10 said audio interactive server has a processing unit for inquiring a moving terminal device of said subject to be connected about a present place of said subject to be connected when information is received as a result of inquiring said predetermined information distribution service provider and judging whether said result 15 information obtained from said information distribution service provider is effective to a latest car position of said subject to be connected or not.

20 20. An audio interactive server according to Claim 14, wherein:

25 said audio interactive server has a processing unit for, when said moving terminal device cannot receive voice output data when said voice output data is to be transmitted to said moving terminal device, transmitting data of non-voice to said moving terminal device and notifying that

there is voice output data to be received by said moving terminal device.